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ABSTRACT

Teacher education students' cognitive and psychosocial development renders current practice as it manifests itself in courses and teaching strategies useless and irrelevant. Cognitive and psychosocial development are the theoretical framework upon which innovation and intervention for teacher education may begin. The basic premise upon which this intervention is based is: teacher education does have available to it requisite theories and data to inform itself concerning who the teacher education student is, both cognitively and psychosocially. Knowing these two variables has far-reaching potential for instituting more informed and effective teacher education programs. Analyses are presented of the theoretical development of positions on cognitive and psychosocial factors in the individual student, demonstrating the knowledge base available to teacher educators in planning for a more individualized and sensitive teacher education curriculum. A description is given of a 5-year teacher education program based upon these developmental theories. The paper concludes with a seven-page bibliography. (JD)

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ISN'T IT ABOUT TIME TEACHER EDUCATION USED WHAT IS KNOWN?

by
ANDREA F. STUCK

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INTRODUCTION

Ten years ago, Fuller and Bown (1975) presented teacher educators with the fundamental question: What kinds of interventions by what kinds of interveners in what context elicit what responses from which subjects? It is obvious that teacher education programs are the academic interventions within teacher education candidates' lives. It is not obvious what those interventions do or do not do. Fuller and Bown's question provides the impetus for reconstruction within teacher education if for no other reason than research on teacher education program effectiveness. The question allows teacher education the avenue for innovation and intervention. Could teacher education not "experiment" with teacher education programs in a systematic, theoretically grounded fashion, pilotting teacher education programs with specifically defined teacher education candidate populations, specifically defined teacher educators, specifically defined curricula, specifically defined processes. The specificity and theoretical grounding would serve as the road to the elusive answer to the fundamental question: what works for whom and by whom?

Yet, it is 1985 and Corbin (1985) states, it seems curious with all the publicity about the need for reform in education that the initiative in the recent movement for

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change seems to emanate almost exclusively from outside colleges and universities. Bell (1985) furthers the indictment of higher education by stating higher education has the sniffles, and might come down with a bad cold or case of pneumonia. There is little doubt that Corbin and Bell have only been the latest persons to cry reform. Follow-up studies from teacher education students and first year teachers have indicated that this reform has been long waited for and little reformation done (deVoss, 1979; 1980; 1981). This leaves this teacher educator with the feeling that teacher education appears to have emerged from nowhere with no historical past and no contextual present. It is about time teacher education informed its practice.

PURPOSE OF PAPER

The purpose of this paper is to posit a plausible and practical approach to the utilization of theories (the historical past) to inform practice (the contextual present) for innovation in teacher education. The theories which are employed in this position paper are cognitive developmental theories and psychosocial developmental theories.

A teacher is nothing more and nothing less than a culmination of the past (experiences, knowledge, life events, etc.) in juxtapostion with the events of the present (students, curricula, societal pressures, etc.) trying to

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create a more informed future for all (Stuck, 1982). Additionally, Howe (1980) states, the human equation of teaching is infinitely varied; the task is complex and undefined upon which there is virtually no agreement. Nothing new is contained in either of these statements concerning teachers and teaching and that is precisely the point --- nothing is new. Perhaps a most novel transendence for the teacher education profession would be to agree that the chances of teacher educators being able to formulate a definitive consensus concerning teachers and teaching is not a possibility nor should it be. The non-found definition of teachers and teaching, need not be exasperating or debilitating, rather the acknowledgement of the diversity allows teacher education the creativity for improvement. Non-definitive teachers and non-definitive teaching allows teacher education the springboard into innovation and effectiveness.

TEACHER EDUCATION DISCREPANCY

There appears to be a discrepancy between what teacher education programs propose to do and the perceptions of those proposals in the eyes of teacher education students and first year teachers (deVoss, 1979; 1980; 1981). Teacher education students, first year teachers, the public, teacher educators, themselves and national commissions all point to

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the less than outstanding success on the part of teacher education programs. There are at least four explicative hypotheses for this discrepancy: 1) poor design of follow-up studies limits the quality of feedback; 2) teacher education ignores follow-up data; 3) failure to design teacher education programs in terms of a) individual differences and/or b) stage development of students; and 4) the cognitive and psychosocial development of the teacher education students which may result in instructional activities and/or courses being less than relevant or useful.

The purpose of this paper is to explore the fourth hypothesis, namely, teacher education students' cognitive and psychosocial development renders current practice as it manifests itself in courses and teaching strategies useless and irrelevant. Thus, cognitive and psychosocial development are the theoretical framework upon which innovation and intervention for teacher education may begin. The basic premise upon which this intervention is based is: teacher education does have available to it requisite theories and data to inform itself concerning <u>who</u> the teacher education student is, both cognitively and psychosocially. Knowing these two variables has far reaching potential for instituting more informed and effective teacher education programs. The following sections of this paper explicate the teacher education student profile according to cognitive development and

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psychosocial development.

TEACHER EDUCATION STUDENT PROFILE

A. COGNITIVE DEVELOPMENT

Numerous studies (Stuck, 1984; Sprinthall and Sprinthall, 1980; Rodgers, 1978; Widick and Simpson, 1978; Knefelkamp and Widick, 1977; Widick, Knefelkamp and Parker, 1975) have been conducted which inform teacher education, as well as other college and university faculty, about the cognitive developmental status of the undergraduate student. The theoretical perspective upon which these authors' works emanate is that of Perry (1970). The following is a review of the Perry (1970) scheme concerning cognitive development.

B. THEORETICAL BACKGROUND

Cognitive development deals with how a person thinks. Cognitive development is often reflected in the literature as the structural-adaptive viewpoint. As defined by Drum (1980) and Rodgers (1981), cognition is a person's way of selecting, organizing and perceiving events in order to respond to those events.

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Piaget

Piaget is credited by many cognitive developmentalists as being the father of cognitive development. Thus it seems fitting to begin this literature review with a brief description of Piaget's contributions to cognitive development.

According to King (1977), Piaget's major contributions to cognitive developmental theory are: 1) structural organization- a person is an active interpreter and organizer of the outside world. The interpreter imposes meaningful order onto the stimuli in order to comprehend, solve problems and guide behavior; 2)developmental sequence- development is seen as a hierarchical continuum which is divided into a series of stages; each stage is seen as qualitatively different as it is more differentiated and integrated than the previous stage; 3) interactionism- development is a product of the person with his/her environment; both maturity or readiness within the individual and elements within the environment are necessary for growth to take place; 4) development proceeds at an irregular rate- movement involves two phases: a) a readiness phase in which the person is prepared or gathers the necessary skills for movement; and b) attainment phase- the individual becomes able to utilize the behaviors characteristic of the next stage; 5) even with attainment of a higher stage, the person may be unable to apply his/her

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new abilities; there exist within each stage a development known as "horizontal decalage". Horizontal decalage conceptually refers to the person's gradual expansion of the use of his/her new found higher stage abilities; and 6) decentering-- which means that as a person takes on a novel experience, a new stage, there is an accompanying egocentricism; a major part of development includes letting go of the self, shifting the focus from self to the larger world.

Through Piaget's seminal works concerning the cognitive development of children, many adult cognitive developmental theorists arose. Among adult cognitive theorists, one finds such names as Harvey, Hunt and Schroder (1960); Hunt (1960); Perry (1970); and Kitchener and King (1981). The commomanlity among these authors is that their works focus on 'adult' cognitive development. But, for the purpose of this study which concerns teacher candidates and teacher educators, Perry (1970) is most appropriate as his work was the foundational work concerning cognitive development in the college years.

Perry

Perry (1970) and his colleagues at Harvard University formulated a cognitive stage scheme focusing upon the intellectual and ethical development of the college student.

The Perry meaning of stage or position in relationship

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to cognitive development is reflected in the following statements by Rodgers (1980); Knefelkamp (1978); Widick and Simpson (1978); Widick, Knefelkamp and Parker(1975); and Perry (1970).

1. a cognitive structure is essentially a set of assumptions which act as a filter or set of glasses dictating how an individual will perceive, organize, and evaluate experiences and events in his/her life and, less, directly, how s/he will behave and feel in response to those events.
2. stages are sequential, that is, they are one at a time apparently in the same order.
3. stages are hierarchical, that is, each successive stage includes the previous stage's rationale but broadens the filter or assumptions such that the persons can make more distinctions and use more categories.
4. stages are qualitatively different. That is to say, the successive changes are not "adding more of the same", but are changes "to a different thing".
5. stages are concerned with structure or **how** we think and not content or **what** we think. The structure between two persons may be identical although the content may be very different.

Now that the meaning of position and/or stage has been delineated, it is important to know that Perry (1970) and his associates formulated a cognitive stage scheme which focuses upon the intellectual and ethical development which is descriptive of how the college student approaches the

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learning environment and develops cognitive skills (Rodgers, 1981).

The nine positions of intellectual development may be grouped into three basic levels. Perry's scheme is outlined below.

Dualism

The first three positions within Perry's scheme are characterized by a dichotomous structure. The world is viewed in absolute either-or terms. Truth is assumed to be known and information is processed to fall neatly into two categories: right or wrong, good or bad, et cetera. The student perceiving the world from one of these first three positions views authority figures as the holders of all truth from whom s/he must learn. Thus there is an overall reliance upon authority versus one's own ideas in learning and decision-making.

Position One. Perry (1970) describes this position as a pure, closed structure. The world as seen from this structure is free of conflict since no uncertainty is perceived. Everything is absolute to the point of inability to imagine the existence of more than one answer to a question. Truth is accepted without question from authority, since authority is always right.

The learner views himself/herself as a container ready to receive all truth. Hence, s/he has difficulty with academic tasks requiring recognition of conflicting points

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of view or even use of his/ her own opinions.

Position Two. Diversity or alternatives are recognized in limited fashion within this structure. The truth still exists and is surely limited to authorities. But, two new strands enter in position two. Authorities place uncertainty before students as a way of helping them learn truth for themselves. Perry (1970) states that uncertainty is seen as "temporary, good for the mind, resolvable and therefore ultimately unreal"(p.78). Learning to find one's own truth is seen by the position two individual as merely a task that requires large quantities of hard work. Thus complexity represents the freedom to explore the process of acquiring truth. The second strand that emerges in position two persons is that since some authorities do not know the truth, those authorities are simply "bad" or "wrong" authorities.

Position Three. The advent of uncertainty now brings with it the possibility that some truths are not yet known, therefore it is acceptable for an authority to not know an answer. However, it is important to note that the position three person believes that the truth will eventually come to be known and , therefore, truth is still always knowable. Position three truth may just come to be known at a later point in time. This ability of authorities to not know all truths invites confusion in evaluation matters. Afterall, if authority does not know truth, how does authority evaluate my version of truth? In this confusion over truth that is

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not yet known, one finds students clinging to the fact that large quantities of work and the authority will lead the way to that truth which has momentarily eluded both authority and learner.

In terms of cognitive skill, the student in dualistic positions are learning basic information and definitions of words and concepts, learning to identify parts of the whole, beginning to be able to compare and contrast things, learning to provide an explanation of why s/he answered as s/he did. In position three, one sees the emergence of comparing and contrasting tasks and the seeing of multiple perspectives. This student can begin to do basic analytic tasks and begins to use supportive evidence (Rodgers, 1981).

Relativism

In positions Four, Five and Six one finds that the individual has discarded the old dualistic perspective of absolutism for a new perspective, that of multiple possibilities. Uncertainty replaces absolutism. Since there are now multiple viewpoints, the authority is released from having the all-knowing omnipotent role. In this release, however, one finds the student elevating his/her own ideas to a position of equivalent status. The relativistic positions find that there are a variety of answers and that the answers are dependent upon the context.

Position Four. This position is the beginning of the shift from certainty to uncertainty. There are still some

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areas in which certainty is the perception. This is a mixed zone. In large part, the position four person has no answers or criteria upon which to base judgment or distinguish one opinion from another opinion. The learner seems to focus his/her thoughts on learning to think the way the authority wants him/her to do so and/or on thoughts about thinking, itself.

Position Five. Perry (1970) states that in position five, "the student perceives all knowledge and values (including the authority's) as contextual and relativistic and subordinates dualistic right-wrong functions to the status of a special case, in context (p.9). Thus, opinions can be judged as better or worse depending upon the existence of supportive evidence. Authorities are now seen as people who are experienced at searching for the truth within a given context. The learner is now capable of introspection and detachment. The ability to evaluate and thus choose is a fearful state as it signals the learner that there may be a narrowing of his/her options.

Position Six. In order to avoid disorientation, the learner realizes that in the sea of relativistic thought one must ultimately choose. One actually affirms one's self through establishing a context in which one's identity may become known. The position six person recognizes the need for commitment, but has not yet acted upon that knowledge.

In terms of cognitive skills, a student in position four is capable of analysis and can do some synthesis. The

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student can do both positive and negative critiques and use supportive arguments well. The student can relate learning to other issues in other classes or to issues in real life (Rodgers, 1981).

In positions five and six, the student can relate learning in one context to learning in another context with some ease and looks for relationships in learning. The student can evaluate, conclude, and support his/her own analysis, as well as, synthesize various points of view. Finally, a student can expand concepts because s/he understands the concepts.

Commitment in Relativism

Positions seven, eight and nine are positions of psychosocial development rather than cognitive development. In these three positions, the student gradually accepts responsibility of himself or herself and establishes his/her identity by acts of commitment and developmental task resolution.

Position Seven. Position Seven marks the time of initial commitment in some aspect of life such as career, relationship or values. This initial commitment is an examined act which presupposes the exploration of alternatives.

Position Eight. In this position the student experiences the implications of commitment and explores the issues of responsibility. The major focus might be the

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style with which to enact one's commitment. The recognition in the fullest sense of relativism is that choosing is an infinite event.

Position Nine. The student experiences the affirmation of identity among multiple responsibilities and realizes commitment is an ongoing, unfolding activity through which s/he expresses life style (Perry, 1970).

Additionally, Perry provides three alternatives to the forward progression throughout the positions. One, temporizing, in which a student delays in a position, explicitly hesitating to take the next step. Two, escape, in which the student avoids the responsibility of commitment, seeking refuge in relativism. Three, retreat, in which a student returns to dualism, perhaps to find the security and the strength to cope with a too-challenging environment. (King, 1981). Thus development, or forward progress, cannot be taken for granted, as deflections to development may also take place.

Although Perry (1970) lists nine positions in his scheme of intellectual development, many authors (Kurfiss, 1975; Knefelkamp and Widick, 1977; Rodgers, 1983; and Taylor, 1983) believe that there is little or no cognitive growth after position five. That is to say, that ultimate development in a cognitive sense is complete at position five. The remaining positions in the Perry scheme are then devoted to the psychosocial task of the development of identity primarily through professional and career

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commitments.

In summarizing the theoretical background of cognitive development, it is apparent that there are perhaps philosophical differences among cognitive developmental theorists about the specific agenda of each stage or position. But, what is apparent is that whether one speaks of Piaget, Perry, Kitchener and King or any other cognitive developmentalist what one is in reality saying is: 1)stages or positions of adult cognitive development are existant; 2) stages are sequential; and 3) stages are hierarchical in a qualitative sense.

The following portion of this document pertains to studies in which cognitive development has been utilized as the focal point of research.

C. Cognitive Developmental Research Studies and Teacher Education

> Validating a developmental theory is a difficult undertaking and requires a careful integration of results from numbers of studies
> (King, 1977)

This review of cognitive developmental studies begins with related studies concerning cognitive development and continues until the studies address the specific population of this study.

Kurfiss (1977) in her article "Sequentiality and

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Structure in a Cognitive Model of Student Development", suggested that the developmental tasks of the college student are threefold. One, a student's absolutistic thought and authoritarian beliefs are broken down by the diversity of ideas in a college setting. Two, after abandonment of absolutistic thought, the student then faces the task of developing intellectual tools for coping with the pluralism of ideas. And, third, ultimately the student's commitment to his or her choices is seen as a flexible, creative process in a relativistic context (p.565).

The Kurfiss study (1977) investigated the comprehension of ideas representing each of Perry's positions of intellectual development, evidence underlying structure and whether or not interviewees show a tendency to prefer higher positions of reasoning or lower positions of reasoning.

Findings support the assertion that: 1) Perry's positions form a sequence of increasingly complex ideas; 2) development is uneven; variations in rate of progress can be expected as growth proceeds in various content areas (areas in which the student is persistently engaged are those most likely to advance first); and, 3) the tendency to prefer higher levels of thinking is not as strong as might be expected (p.269).

King (1977) provides a basic review of research on Perry's theory. The following studies and findings are explicated therein.

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Meyer (1975, 1977) hypothesized that private college freshmen would be more dualistic than public college freshmen; that private college seniors would be more committed than their public college counterparts; and that freshmen at both colleges would be lower on the Perry positions than seniors. The findings of Meyer's study (1977) are; 1) there were no significant differences in position scores by class across colleges; and 2) freshmen did score statistically lower than seniors on the Perry positions.

Blake's (1976) inquiry concerned whether students in a science-oriented curriculum would show upward movement in Perry position scores over their college years. A significant upward trend over the college years was present with freshmen scoring 2.84; sophomores scoring 3.13; juniors scoring 3.48; and seniors scoring 3.55.

Clinchy, Lief and Young (1977) querried about the relation between types of schooling and the way high school girls reason about moral and epistemological issues. Findings indicated that seniors scored significantly higher than sophomores at progressive schools, but not at traditional schools.

King (1977), Kitchener (1977), and Kitchener and King (1977B) have investigated the construct of Reflective Judgment, which focuses on how people reason and arrive at a point of view. How people consider the nature and the role of evidence in their arguments, how they analyze and

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synthesize available evidence and what role authorities and experts play in making judgments (p.43). Once again, a consistent upward progression of scores was found across groups.

Findings from all of these studies indicate that intellectual development continues and can be traced through the post-adolescent years and cannot be accounted for by either formal operational reasoning skills or verbal aptitude (King, 1977).

King (1978) has made application of the Perry scheme in the classroom by designing programs to promote student development. King states that the Perry scheme is helpful in three major ways: establishing program goals, planning the steps in implementing the program and in evaluating the expectations of the program (pp. 44-45).

One of the first major intervention programs based upon the Perry scheme was conducted at the University of Minnesota (Knefelkamp, 1974; Widick, Knefelkamp and Parker, 1975). The basic hypotheses of these authors were: 1) college students would respond differentially to varying instructional approaches as a function of their level of intellectual development; and 2) that both academic achievement and personal growth could be facilitated by proper matching of student developmental levels with instructional approach (p.45). Indeed, the findings substantiate greater intellectual movement in the experimental class and provides evidence for progression

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along the scheme when appropriate instructional approaches were utilized by the instructor.

Once this foundational study was provided and validated, others developed and substantiated intervention programs. Touonton, Wertheimer, Cornfeld and Harrison (1977) conducted a program whose purpose was to increase the complexity with which students think about career issues. Knefelkamp-Slepitza (1976) developed a Career Development Model based upon Perry's scheme. Mason (1978), Stepitzel (1976) and Wertheimer (1976) helped establish the validity of the Career Development Model.

Mentkowski (1983) states that human development can supply the unifying purpose for higher education. She further stipulates that: 1) development is differential; 2) change is gradual; 3) change can be attributed to student performance in the curriculum; 4) faculty understanding of developmental theory is critical if it is to function; 5) opportunities are necessary for faculty to experience and practice responding to student styles of learning and modes of thinking; and, 6) faculty need to collaborate to build learning activities across the curriculum to facilitate student development (pp. 2-6).

Widick and Simpson (1978) designed yet another classroom intervention program based upon the Perry scheme. The themes of this study were: developmental progress, subject matter mastery and learner satisfaction. Results indicate that: 1) the treatment section had the greatest

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number of individuals showing stage movement; 2) the developmental approach seems to have a positive effect on subject-matter mastery; and, 3) the developmentally designed class was a positive experience for the learners (p.54-55).

Welfel (1982) utilized the Reflective Judgment model to investigate career counseling of college students. Welfel found that when intellectual/cognitive development is utilized there is provided another way to understand and organize clients responses, thus the counselor is more adequate in understanding the client and providing patterns for movement for that client.

Phillips (1980) has used the Perry model to assess college of education students finding all of the undergraduates assessed to be in high dualistic positions.

Sprinthall and Sprinthall (1980) in an effort to evaluate teachers for growth utilized a cognitive developmental perspective. Findings in this study indicate that psychological stage development does effect performance in complex human tasks (p.281).

Hart (1976, 1978) suggested that effective learning environments represent complicated three way interactions among the stage of the pupils, the stage of the teachers and the materials.

Sprinthall (1979) states that measures of academic achievement and scholastic aptitude fail to predict adult success, but measures of cognitive development do indeed predict adult success. Sprinthall cites Sullivan et. al. as

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stating that higher more complex conceptual levels allow teachers to be more adequate and competent. Higher conceptual level teachers respond to pupils in a thoughtful, feeling, democratic, flexible approach and are more apt to vary in structure and teaching methods.

As one can readily see, the studies concerning cognitive development are numerous, diverse and cross-disciplinary. Applications of the theory and the results of the studies are many and most promising.

The following section of this document concerns the theoretical background of psychosocial development.

D. PSYCHOSOCIAL DEVELOPMENT

As there is a cognitive developmental perspective so, too, there is a psychosocial perspective. For too long now higher education has separated the mind of the student form the personal making of meaning is those students' lives. Therefore, to base program changes soley on a cognitive perspective is to short circuit the program, itself, the student and eventually the lives of the public school students to whom teacher education is ultimately responsible.

The following is a review of the theoretical background of psyshosocial development.

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E. PSYCHOSOCIAL DEVELOPMENT: THEORETICAL DEVELOPMENT

According to Drum (1980) and Rodgers (1981), psychosocial development concerns the **content** issues in a person's life. Theorists ascribe to relative spans of time or ages in which specific issues present themselves to individuals. Persons who successfully resolve or negotiate these content issues or challenges enhance their chances of positive growth.

College students have a great deal of difficulty relating their course work to the major issue --- the search for meaning in their lives (Widick, Knefelkamp, Parker, 1975). Perhaps this is because in practice the classroom is almost exclusively reserved for matters of the mind. This "mind" practice places the undergraduate between two mutually exclusive environments --- the classroom for the mind and the peer culture which effects personality growth (Korn, 1968).

Erickson (1968), Chickering (1969) and Sanford (1967) have commented extensively on the difficulty that colleges have had in making education personally meaningful. Sanford (1967) has persuasively argued that the proper role of the educational institution is to foster individual development, "to promote an identity based on qualities such as flexibility, creativity, openness to experience and responsibility" (p.9). Sanford (1966) conceptualized the college as a developmental community with the task of

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presenting the student with "strong challenges, appraising accurately his/her ability to cope with these challenges, and offering him/her support when s/he becomes overwhelmed (p.41).

Development, it seems, has long been a much talked about collegiate task, albeit duty. The following is a presentation of a theoretical background for psychosocial development. The works of Erickson and Chickering will be presented.

Erickson

As Piaget fathered cognitive development, Erickson fathered psychosocial development. Historically, the most important developmental theorist has been Erik Erickson (1968), who laid the foundational cornerstone for other theorists, in his eight stage model of psychosocial development (Widick, Knefelkamp, Parker, 1975). Erickson's observations and theoretical constructs are primarily concerned with psychosocial development.

In his book, Childhood and Society, Erickson suggested that: 1) "side by side with the stage of psychosexual development described by Freud, were psychosocial stages of ego development in which the individual had to establish new basic orientations to himself (herself) and his (her) social world; 2) that personality development continued throughout the whole life cycle; and 3) that each stage had a positive

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as well as a negative component" (Erickson, 1970, p.19).

The following eight stages are employed by Erickson's psychosocial life cycle theory: 1) Trust vs. Mistrust; 2) Autonomy vs. Doubt; 3) Initiation vs. Guilt; 4) Identity vs. Inferiority; 5) Identity vs. Role Confusion; 6) Intimacy vs. Isolation; 7) Generativity vs. Self-Absorption; and 8) Integrity vs. Despair and Disgust. In each stage there is a new dimension of social interaction possible, that is , there is a new dimension in a person's interaction with self and with his/her social environment.

Specifically, the stages of Identity vs. Role confusion and Intimacy vs. Isolation concern this study, thus these stages will be expanded and defined.

Identity vs. Role Confusion

Erickson's stage of Identity vs. Role Confusion extends from ages twelve through eighteen and from ages eleven through fourteen of this stage the corresponding Freudian stage is the puberty stage. The major tasks of this stage of development are: 1) finding a romantic partner; 2) dealing with a variety of new ways of looking at and thinking about the world; and, 3) striving to develop a theory or philosophy which will bring all the varied and conflicting parts of society into a working and peaceful whole. As Erickson states, "the adolescent is an impatient idealist who believes that it is as easy to realize an ideal as it is to imagine it" (p.21).

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The development of identity will take place if the young person can integrate the different images of self into a whole that makes sense and shows continuity with what was (the past) while preparing for what might be (the future).

Although the influence of parents is much more indirect at this age/stage, it is critical to note that preparation for successful identity formation took place early on with the formation of trust, autonomy, initiation and industry ---- all of which were fostered or not fostered by parents from the birth of the child.

Although it is obviously important that the individual bring positive stage development with him/her to this stage of Identity Formation, it is important to note that the environment in which the individual finds him or herself is also a critical factor in the attainment of personal identity. For example, Elkind (1970) cites the fact that in America women are often viewed as second class citizens, thus it may be harder for females to arrive at a sense of psychosocial identity. Likewise, Straub (1980) found that identity formation for women did not follow the same pattern as males --- identity took place much later in the female life span.

The opposite end of the spectrum in this stage is role confusion. Herein, the individual has a sense of not knowing who s/he is, where s/he belongs or to whom s/he belongs.

Equally important is knowing that one may seek a

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negative identity (such stereotypes such as hippie, junky, hood, delinquent, etc. come to mind). Having an indentity whether positive or negative appears to be preferable to no identity at all.

Once again, it seems important to realize that life is in a state of constant change and that confronting problems at one stage is not a guarantee against the re-appearance of these same problems at a later stage, or against finding new solutions to them.

Intimacy vs. Isolation

Age delineation and Freudian stages now exit the life cycle pattern proposed by Erickson. Stage six, Intimacy vs. Isolation,is considered to be young adulthood. Young adulthood being the period of courtship and early family life, the extension of which is from late adolescence till middle age.

Intimacy means "the ability to share with and care about another person without the fear of losing one's self in the process" (p. 73). Intimacy not only involves sexuality, but also includes the relationship between friends.

The extreme in a negative direction is a sense of isolation, being alone without anyone to share or the fear of caring.

Erickson's eight stages of psychosocial development from birth to old age trace the options that are available to humankind. The journey is filled with the hope that one

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may develop, have all of the opportunities needed to resolve problems and come to live life in a very healthy manner, while always lingering is the thought that non-resolution will lead to an unhealthy life span. As with all things, good and bad are present, it is with hope that each of us receives the most significant positive growth potentials from our parents in order that each of us may healthfully accept the challenges of life and grow into the positive responsibilities of adulthood Elkind (1970).

Chickering

Chickering concerns himself with the psychosocial development of the individual within the college years. Chickering strives to delineate the developmental tasks facing the college student; show that colleges can make a difference in relation to the positive growth of students; and establish what it is within the college environment the facilitates or hinders student development (Heidke, 1982).

As the reader has seen, Erickson, the father of psychosocial theory, concerns himself with life development from birth to old age whereas Chickering (1969,1972) concerns himself, primarily, with the seven major dimensions of development pertinent to the psychosocial development of college students. Those seven dimensions of development are: competence, emotions, autonomy, identity, interpersonal relationships, purpose and integrity.

Chickering asserts that "universal higher education has

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created another developmental period" (1972, p.1). He furthers his thought by stating that developmental changes do take place during this period (seventeen through the late twenties) and that: 1) this may be the last opportunity for major change before the stability generated by more fixed social, interpersonal and occupational roles and responsibilities take over; 2) some of these changes are shared by those who do not attend colleges; but, 3) colleges do make major differences; and , 4) the patterns established at this time persist long into adulthood.

Chickering relied upon a variety of data-gathering techniques to formulate his developmental theory. Included in these techniques were: interviews; questionnaires, personality inventories, environmental assessments, vocational interest measures, and studies of institutional documents. This extensive research is reported in his paramount work: Education and Identity.

In essence, Chickering's seven vectors of development may be thought of as follows:

1. Upon entry into college the freshmen is working on the vectors of competence, managing emotions and autonomy;
2. Mastery of competence, managing emotions and autonomy are all necessary for successful formation of the vector called identity which is the primary task for the college sophomore;
3. Identity formation, in turn, provides the necessary framework for the junior who must work on the vectors of:

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freeing interpersonal relationship, developing purpose and developing integrity;

and

4. Mastery of freeing interpersonal relationships, developing purpose and developing integrity are the work of the senior and the graduate student.

Thus, the freshman and the sophomore student have as their work, the psychosocial tasks of acheiving competence, managing emotions, developing autonomy, all of which aid in the formation of identity. While the junior and the senior and the graduate student wrestle with the vectors of freeing interpersonal relationships, developing purpose and developing integrity.

Now that the vectors of development have been enumerated, their order established and who works on what vector and when that work is to be done, what are the definitions of each vector?

1.Competence. Competence is a threefold process. One must have intellectual, physical and social competence in order that one have a real sense of complete competence. A sense of competence is defined as "the confidence one has in his/her ability to cope with what comes and to achieve successfully what s/he sets out to do" (Chickering, 1972, p.9).

Intellectual competence concerns the acquisition of information, improvement of mental ability, as well as, the

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development of critical thinking.

Physical and manual competence, as a contributor to the vector of competence, simply refers to the ability to engage in: a) athletics/intramurals and compete under predetermined conditions that usually include the presence of the other competitor and a measurement of some kind (time, points, weight, etc.) and/or b) having experiences in which skills are developed in the arts and the crafts.

Engagement in physical (athletic) or manual (arts/crafts) activities promote productive carry-over to other areas and tangible and visible creations offer clear evidence of achievement and progress both of which contribute to identity formation (Chickering, 1972).

Interpersonal competence is indicated in every action or interaction with another person. "Each action directed toward another consciously or unconsciously, has an effect of some kind, and the extent to which it produces this effect can be taken as the measure of competence" (Chickering, 1972, pp.31-32). To be interpersonally competent one must listen as well as be heard, weigh one's role in response to the conditions and avoid excessive impositions of one's own views (Chickering, 1972).

Thus competence is made up of three sub-vectors: intellectual, physical and interpersonal competence. Once one learns the skills of the sub-vectors, then the sense of competence as "the fitness or ability to carry on those transactions with the environment which results in the

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maintainence of self, growing and flourishing" (Chickering, 1972, p.74) can take place.

2. **Managing Emotions**. Managing emotions focuses on the emotions of sex and aggression in the seventeen to twenty-five year age range and it is definable directionally (Rodgers, 1980). The vector of managing emotions moves through the following phases: 1) release of rigid controls over emotions by the external rules of one's heritage or peer group; 2) achievement of an awareness and acceptance that these emotions are legitimate and normal; 3) trust in one's feelings as a basis for action --- that is, appropriate action is often an integration of logic and these emotions; 4) acting on these emotions, both vicariously and for real, and receiving feedback; 5) acting and receiving feedback repeatedly; and 6) reflecting on one's experience with sex and aggression and integrating and internalizing a personalized control (Rodgers, 1980).

3. **Developing Autonomy**. There seem to be three components that contribute to the development of autonomy. Those components are: development of emotional independence, development of instrumental independence and recognition of interdependence.

Emotional independence begins with disengagement from the parents, reliance on peers and ends with personal autonomy (Chickering, 1972).

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Instrumental independence has two components: 1) the ability to carry out activities on one's own; and 2) the ability to leave a place and get to another if one wishes.

Interdependence might more appropriately be defined as mature dependence. Mature dependence is the state of having relationships of reciprocal respect and helpfulness with parents and peers such that the strength and weaknesses of self and others are recognized and mutually satisfying (Chickering, 1972).

It seems fair to say that when one masters the skills of emotional and instrumental independence, then one forms mature dependence and can more readily accomplish the tasks of interdependence all of which leads to the accomplishment of the growth vector called autonomy.

4. Establishing Identity. Establishing identity is only achievable if and when the previous three vectors of achieving competence, managing emotions and developing autonomy are mastered. Establishing identity may simplistically be defined as an increasing sense of self. Three variables involved in the accomplishment of a sense of self are: the acceptance of body and appearance; clarification and acceptance of sexual identity; and varied, direct experiences and roles accompanied by meaningful achievement (Erickson, 1960; Sanford, 1966).

5. Freeing Interpersonal Relationships. With the

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emergence of the vector of freeing interpersonal relationships, one leaves the freshman and sophomore years and embarks on the tasks of the junior, senior and graduate years.

Freeing interpersonal relationships is arrived at through increased tolerance/acceptance of others who are different from ourselves and increased ease in relationships with peers and adults which implies an increased depth in intimacy. The implications are that friendships are established, significant other persons are found and cultural differences are allowed. All of the above mentioned accomplishments proceed on the basis of increased intimacy and the diminished state of stereotyping. "There is indeed a sense of fusion with the essence of other people" (Erickson, 1950 p.114).

6. **Developing Purpose**. Development of purpose requires formulating plans for action and a set of priorities that integrate three elements: 1) avocational and recreational interests; 2) pursuit of vocational interests; and 3) dealing with life style issues including concerns for marriage and family. Increasing integration gives shape to experiences, meaning to existence and release of energy for coordinated action (Chickering, 1972 p.108).

In essence, developing purpose entails: what one will be or not be, with whom one will be or not be, how one will spend leisure time and what one's values are. All of these

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questions and choices when answered and made, re-answered and re-made are indicative of commitment in adult life stages.

7. Developing Integrity. The development of integrity involves the development of standards by which one appraises the self and in terms of which self-esteem varies as a consequence of the appraisal (Chickering, 1972).

Two integral variables in the development of integrity are: humanizing values and personalizing values. When one humanizes values, one realizes that rules and their purposes do not have absolute connections. But, whatever the values by which one lives are, those values are internalized. Personalizing values refers to the congruency between one's behavior and one's values. Words equal deeds and thoughts and that in turn comprises the vector and quality called integrity. Achieving congruence is a life time task which is sorely tested and sometimes shattered.

In summarizing Chickering's version of psychosocial development, it is important to realize the following items in relationship to vectors.

1. A vector has content (i.e. managing of emotions).
2. A vector has directionality --- that is it moves toward an adequate resolve.
3. A vector comes into being at a certain time/ age (i.e. freshman year).
4. A vector must be resolved at a certain time/age (i.e.

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two to seven years).

5. A vector accomplishment or non accomplishment lasts throughout life.

6. A vector accomplishment or non-accomplishment continues after its time of prominence in our lives and may re-occur.

7. A vector's resolve or non-resolve has an effect upon the rest of one's life and the accomplishment of subsequent vectors.

8. A vector's resolution can be either adequate or inadequate.

(Rodgers, 1983)

The sources of environmental influence on development as discussed by Chickering are: 1) friends, groups and student culture; 2) faculty and administration; 3) residence hall arrangements; 4) curriculum, teaching and evaluation; 5) institutional size; and 6) clarity of institutional objectives and internal consistency.

The theoretical background set forth by Erickson (1968) and Chickering (1969,1972) seems to highlight the fact that development in adulthood is a viable event. That stages are definable is evident. Regardless of theoretician, both Erickson and Chickering imply that hope and despair loom life-long before us all.

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F. Psychosocial Research Studies and Teacher Education

> There are only two or three human stories and they go on repeating themselves as fiercely as if they have never happened before.
> Willa Cather

There are constant criticism of Chickering's work. It appears impossible to separate Chickering's own personal views about student growth from his empirical findings (Widick, Parker, Knefelkamp, 1978). But those authors do conclude that Chickering's findings do substantiate the growth patterns hypothesized by the vector model of development.

It is important to note that development according to Chickering occurs through cycles of differentiation and integration as well as the characteristics of the person who encounters the experience.

> Increased <u>differentiation</u> occurs when one comes to see the interacting parts of something formerly seen as unitary, when one distinguishes among concepts formerly seen as similar, when actions are finely responsive to purposes or to outside conditions, when interests become more varied, tastes more diverse, reactions more subtle. In short, we become more complex human beings...
>
> But increasing differentiation must be accompanied by increasing <u>integration</u>... Relationships among parts must be perceived or constructed so more complex wholes result. Concepts from different disciplines must be brought to bear on one another and connected in in ways appropriate to varied tasks and problems. Consistencies between word and deed, must be achieved Impulse and emotion must pull together with conscience and reason. Short run hedonism must coordinate with

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long-run purposes. (1969,p.292)

Chickering's theory may be validated through studies which were not specific to his theory. For example, Astin (1977) and Feldman and Newcomb (1969) concluded from studies on student characteristics and behaviors that Chickering's vectors were supportable (Straub, 1982). Cognitive theorists substantiate individual vectors. Loevinger (1976) substantiates the vectors of managing emotions and freeing interpersonal relationships; Perry (1970) substantiates the vectors of intellectual competence; and Kohlberg (1971) substantiates the vector of integrity (Straub, 1982). From career development literature, Holland (1966) supports the vector of purpose.

With such diverse research serendipitously establishing the validity of Chickering's theory, extensive efforts have been made to clarify and directly substantiate the theory. Winston, Prince and Miller (1979) developed the Student Developmental Tasks Inventory (SDTI-I and SDTI-II). This instrument behaviorally assesses the Chickering vectors of: Developing Autonomy. Freeing Interpersonal Relationships and Developing Purpose.

In 1978, The University of Iowa undertook the development of three additional assessemnt instruments: 1) the Erwin Identity Scale; 2) the Mines-Jensen Interpersonal Relationship Inventory; and 3) the Barratt Developing Purpose Inventory. These instrument are still exploratory concerning reliability and validity estimates (Straub,

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1982).

However, Heidke (1982) utilized all three instruments in his assessment of college students at Kenyon and The Ohio State University. Heidke found Ohio State students to be more successful at identity achievement than Kenyon students. His use of the Mines-Jensen Interpersonal Relationship Inventory instrument revealed a relatively high advancement between the freshman and senior years at Ohio State and a relatively low-level change at Kenyon. The use of the Barratt Developing Purpose Inventory revealed Ohio State students as having slightly greater mastery than Kenyon students.

Psychosocial research has been carried out by many authors, but obviously not always in relation to Chickering's theory. In reviewing psychosocial development studies (simultaneously known as life-span literature or life cycle literature) the author finds that research in this area is in its fundamental stages. The existing studies are descriptive studies with empirical validation far off in the future. Therefore, the studies cited in this review are considered seminal works based upon Erickson and Chickering's theories.

C. Additional Psychosocial Studies

The major psychosocial development studies which have been dealt with the evolution of the male life-span are:

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Levinson et.al., The Seasons of a Man's Life (1978); Valliant, Adaptations to Life (1977); and Farrel and Rosenburg, Men at Midlife (1981).

Levinson

Levinson (1978) established in his study of white males ages thirty-five through forty-five a repetitive cycle of stability and transition. A Levinson stage or stability cycle is a period of time lasting from three to seven years. Levinson's periods of transition last for approximately five years with overlappingness from the last stable period and into the next stable period.

Life-span appears as follows according to Levinson:

```
*_________T_________T________T________T__________T____
birth  17  22 S  28  33 S  40  44 S 50  55  S 60    65
```

T= transition period

S= stable period

The life span in Levinson's study has four basic eras: 1) childhood from birth to around age twenty-two; 2) early adulthood from ages twenty-two through about age forty-five; 3) middle adulthood from forty-five through about age sixty-five; and 4) late adulthood from about age sixty-five through death. Each of these eras of life has its own

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unique and unifying qualities. These qualities have to do with the character of living --- the biological, the psychological, and the social aspects of each person's life.

"The characteristics of early adulthood are: fullness of energy (biological), capability and potential (psychological) as well as external pressures (social). In early adulthood, personal drives and societal requirements are powerfully internalized, at times reinforcing each other and at times in stark contradiction with each other" (Levinson, 1978 p.23).

Middle adulthood sees crucial developmental change. These changes are reflected in three contrasting perspectives: 1) changes in biological and psychological functioning; 2) the sequence of generations; and 3) the evolution of careers and enterprises.

Late adulthood is an era of decline as well as an opportunity for development. One arrives at the appraisal of his (the Reader is reminded that the study is based on an all male population) life's work and his life in general. He finds meaning and value in his life and comes to terms with death.

Whatever the period of transition or stability, the developmental tasks have two major thrusts. First, one may work on structure. One may structure build which means to make a choice, build life around that choice and enrich that period of choosing. Or one may structure change which means to re-appraise, explore new possibilities and make a choice

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for the next stage. Second, one may work on a specific component of the life structure such as one's occupation, family, mentoring relationship, mutual friendships, life dreams, etc.

Farrel and Rosenburg

Farrel and Rosenburg (1978) found in their study of males ages twenty-five through thirty and ages thirty-eight through forty-eight that four developmental paths took place. Farrel and Rosenburg state that those developmental paths are related to psychological and social situations. The paths of development are: transcendent generative, psuedo-developed, midlife crisis and punitive disenchanted types.

A transcendent generative male will openly admit to crisis and deal with it, respond and adapt.

A psuedo-developed male attempts to cope by adapting and saying that everything in his life is fine. He pretends he has everything under control and is all probability a rigid authoritarian.

A midlife crisis path male exhibits signs of disintegration, has no coping mechanisms, superficial relationships and is stagnated.

A punitive, disenchanted type has gradual exhibitions of crisis symptoms and has no escape mechanisms. The male seems to be chronically disenchanted.

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Males in Farrel and Rosenburg's study seem to be able to achieve stability in work roles, but are much less likely to be all right with intimate roles such as friendships and spouses.

Valliant

Valliant's (1977) study is often said to be the study of the best and the brightest. This study is a look into the adaptive styles of 268 males. Basically, Valliant established a hierarchy of adaptive ego mechanisms. Those mechanisms are: psychotic, immature, neurotic and mature.

Whether one looks at Levinson (1978), Farrel and Rosenburg (1978) or Valliant (1977) one sees patterns that are emergent in the male. Some patterns are age related, some patterns are theme related, and some patterns are adjustment/coping related. But, patterns there are. The most critical aspect of the patterning behaviors of males is that 67-75% of the males at midlife are <u>not</u> developing in healthy patterns (Farrel and Rosenburg, 1977). In Farrel and Rosenburg's terminology, most men at midlife are developmentally dying.

Psychosocial developmental studies which have enlightened the life span of both males and females with one study have been contributed by Neugarten (1968), Lowenthall (1975) and Sheehy (1976).

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Neugarten

Neugartens' (1968) focus was on males and females from age forty through age seventy-five. Her major findings were:

1. there is a difference between males and females. Males view themselves in their careers and females view themselves in terms of family;
2. the shift in midlife is in terms of time remaining, time is now considered to be finite and one must now re-examine life;
3. a crisis is not a predictable event, if an event is predictable, then one can plan for it and then cope with it much more easily;

and

4. there are four basic personality types each of which will predict how one will age.

Those four personality types are: integrated, armor defended, passive-submissive and uninterrupted. An integrated personality type means that one deals with aging effectively. An armor defended personality type means that one denies aging, resents aging and handles life as if s/he were not aging. A passive/submissive personality type means that one needs an emotional crutch to handle aging. An uninterupted personality type means that one cannot deal with the process of aging at all.

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Lowenthall

Lowenthall's (1975) study deals with both males and females, but is really only representative of the middle class. The concepts that are important to psychosocial development according to Lowenthall are:

1. the individual has or has not the ability to cope with transitions;
2. intimacy is the buffer for crisis;
3. good social interaction is a prerequisite to good competency and coping;
4. there are two high risk groups: a) post parental women; and b) males without intimate relatives;
5. low socioeconomic status males are much more susceptible to crisis;
6. the importance in development is life events versus age of transition;
7. if one can anticipate change it is helpful; and
8. males and females seem to be in inverse patterns.

Sheehy

Sheehy's (1976) study is a journalistic adventure through the life span of both males and females. The Sheehy stages of development are as follows: picking up roots, provisional adulthood, age thirty transition, putting down

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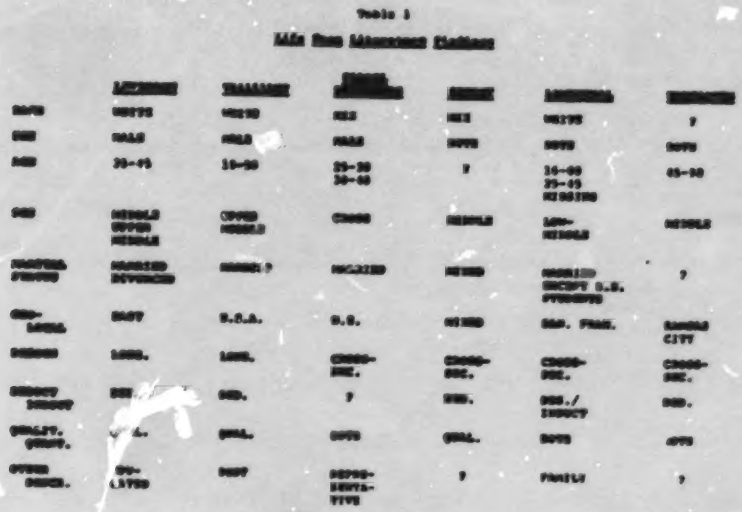
roots, midlife transition and restabilizing and flowing.

The entire Sheehy expose: Passages: Predictable Crises of Adult Life, focuses on periods or stages with both positive resolution potentials being exposed as well as the trauma of negative resolve.

The following chart summarizes the major authors delineated in this literature review. The chart explicates the demographics of the studies and the methodologies of the various studies.



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Studies which further these seminal descriptive works are: Reinke (1982); Otero (1982); DiCicco (1982); Sherrill (1983); and Halpert (1981).

Reinke (1982) found that 78% of the females in her study showed major psychosocial changes between ages 27-30 in the form of personal disruption, reassessment and reorientation with increased focus on self and increased psychosocial development.

Otero (1982) defined competence as a self efficacy, optimistic trust in interpersonal relationship and the ability to cope with life's events. Otero found that competent subjects were less involved with past stressful events and had positive emotional involvements with decreased thoughts about negative events. The competent person had the potential to adapt as well as grow from negative events.

DiCiccio (1982) found that female development differs in important ways from that of male development, particularly in the roles of affiliation and achievement. Additionally, early mothers are less exploratory and much more committed than single women or late mothers.

Sherrill (1983) established that autonomy is related to satisfaction with work relationships.

Halpert (1981) found that based on Levinson's theory the Age Thirty Transition shows increased career commitment especially when compared with the 21-27 age span of Entering the Adult World. Occupational formation is not accomplished

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until one is well into the thirties and ego identity is not achieved until after the Age Thirty Transition.

In summary, psychosocial development may be a function of what Erickson (1968) calls the epigenetic principle. That is, there are three major forces working within and upon the individual : 1) biological or physiological factors and changes; 2) psychological factors and changes such as society, gender, psychological make-up; and 3) external pressures such as environmental pressures, norms and institutions. It appears as if the internal and the external stimuli may coincide or collide. Coinciding stimuli yields a new period. Collisions of stimuli yield transitions. Thus each new stage is borne of collisions or conflict between the external and the internal.

Each stage is qualitatively different in its developmental tasks. Some stages deal with who one is, other stages deal with whether one really wants to be who s/he is; while still other stages deal with the question of the value of the lived life.

College graduates have the highest probability of positive resolution throughout life (Rodgers, 1983).

Marcia (1956, 1966) studied resolution adequacy and found four major ways in which to deal with life crises. One, a person may be in moratorium which means that one is working on the problem, but has yet to solve or resolve the event. Two, foreclosure which means that the person is locked in. In essence, a foreclosed person does not make

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the correct choice and sees no way out or no way to help one's self without gigantic risks. Three, diffusion which means that a person refuses to recognize or know that there is a crisis existing, therefore, s/he will not experience the crisis. And, four, identity which means that a person has accomplished dealing with the crisis. Of the four ways of dealing with transition or crisis, only identity will allow a positive developmental growth pattern to emerge.

In essence, psychosocial development is defined as within and between persons orientations to developmental issues, tasks or life events. Orientations are functions of how one resolves or does not resolve or adapt. Therefore, psychosocial development is a description of issues, tasks and/or life events and the pattern of resolutions of given persons (Rodgers, 1983).

H. Summary of Cognitive and Psychosocial Development

The importance of cognitive and psychosocial development can not be ignored by colleges especially if colleges take seriously the charge of being a 'developmental commmunity'

It is obvious that students are individuals with separate specific needs, but as Chickering states,

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> "it is not that all students change along all vectors, not that environmental conditions operate with equal force for all students at all institutions, but that changes do occur for some students and that they can occur more frequently for others. Environmental conditions at some institutions do foster or inhibit such changes and support the modification that can increase the frequency of the valued development. (1969, p.5)

Fuller and Bown (1975) have placed this issue of development clearly within the hands of teacher education programs and teacher educators by asking the question: What kinds of interventions by what kinds of interveners under what conditions for which students will enhance those students?

The literature is revealing to teacher education in many ways. One, Rodgers (1979) and Phillips (1981) clearly indicate that the overall population of undergraduates as well as the specific population of teacher candidates are dualistic upon entry into colleges. The same dualistic condition exists upon exit for 85% of the same population. This statistic alone points to the failure of colleges to facilitate cognitive growth.

Two, psychosocial literature clearly delineates the tasks that present themselves to persons. Teacher education has these persons both as clients (teacher candidates) and as employees (teacher educators). Yet, there exist few, if any, research studies directly examining those populations within teacher education. How does teacher education

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proport to enhance the growth of individuals if who those persons are psychosocially is still unknown? There appears to be existing theoretical information that has yet to be extrapolated and put to work in the area of teacher education.

These difficulties point to the need for seminal work in the areas of cognitive and psychosocial development as it pertains specifically to teacher candidates, teacher educators and teacher education programs. Little, if anything is documented concerning the developmental aspects of the interveners (teacher educators) or the interventions (courses, course content, teaching methods, etc.). (See Stuck, 1984).

Thus teacher education students develop in both "life span" and a "mind span" senses. Utilizing these two developmental paradigms an innovative teacher education curriculum may be formulated and practiced.

The following section of this paper proposes an innovative teacher education program based upon cognitive and psychosocial development.

TEACHER EDUCATION CURRICULUM

The question concerning teacher education curriculum must not be by whose standards? Developmental perspectives

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posit the foundational question which pertains to order and processes by which areas of study are delivered to teacher education students. The issue within teacher education has never been and never will be format, it will always be function. The issue before teacher education in this era of innovation is the issue of process informed by theory versus content.

Teacher education programs must take from theory their undergirding. One educates teacher education students by beginning where those learners, themselves are. It is a given that teacher education students are in large numbers dualistic and striving to develop autonomy. Teacher education students are in search of self with black and white minds relying on authority (teacher education programs and teacher edcators) to light the way.

The following five year teacher education program is a suggested format and process for the lighting of the way for teacher education students.

A. FIRST YEAR PROGRAM

The following teacher education curriculum model is informed by developmental theory in that the order, sequence and expectation of the courses and thus the program, itself, are addressed according to expected teacher education students' stages, needs and desires. The basic assumption undergirding this program is : teacher education students

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begin college in the dualistic stage of cognitive development and in search of autonomy. These students' stages demand that certain procedural events take place, namely that courses, assignments and information be presented in clear cut, concise concrete manners with highly structured and personal atmospheres (Knefelkamp and Widick, 1977). Students do not need to be plunged into the mire of general education as it is currently practiced. General Education, according to the Task Force on Profiles of Education (19), has as its purpose the understanding of the interrelated nature of knowledge and the universe. Surely, no dualistic, black/white thinker confused about selfhood could be expected to understand the nature of the universe! Where does this leave teacher educators and teacher education programs? The answer is relatively clear, it leaves us asking ourselves, what is it that is concretely known about teaching and learning? The answer to that question is founded in literature. Research on teaching and teacher effectiveness tells readers that it is known what the perceived problems of teachers are (Cruickshank, 1975), teacher effectiveness variables are known (Good, Brophy, Rosenshine and Furst, etc.), micro teaching skills are known, reinforcement theories and practice, especially behavior modification techniques are known, classroom management techniques are known and instructional strategies are known. The above mentioned items are all information and/or skills that teacher education students prefer, need

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and are satisfied with because these very items offer actual experiences with teaching --- concrete, structured experiences appropriate to the teacher education students' developmental levels.

The content of this first year in a teacher preparation program can be taught succintly, teacher education students can learn to behave effectively, have concrete skills and options if these skills and options are presented in developmentally sound fashions (i.e. provide structure, limited viewpoints, highly personal atmosphere, process the information with the students, and make activities experiential (Knefelkamp and Widick, 1977)). Sanford (1966) furthers the notion of appropriateness to developmentally level by explicating the notion of necessary challenge and support.

The following chart adapted from Quickshank (1975) may further illuminate the type of experience and the use of reality within activities that may be presented to the teacher education student.

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TABLE 2: TYPE OF EXPERIENCE/USE OF REALITY

TYPE OF EXPERIENCE	REAL (R) REALITY USED	MODELED (M) A MODEL OF REALITY USED
	CR	**CM**
CONCRETE 1st hand	STUDENT LEARNS ABILITY CONCRETELY IN SITU - CONCRETE EX. teaching	STUDENT LEARNS ABILITY WHILE ENGAGED WITH A MODEL OF REALITY EX. microteach reflective teaching simulations simulation games biography
	VR	**VM**
VICARIOUS 2nd hand	STUDENT LEARNS ABILITY VICARIOUSLY FROM REALITY OR A RECORDING OF REALITY EX. observe teaching protocols documentary films case studies still pictures books, non-fiction tape recordings	STUDENT LEARNS ABILITY VICARIOUSLY FROM A MODEL OF REALITY OR REALITY EX. film fiction books, fiction
ABSTRACT	STUDENT LEARNS THE ABILITY ABSTRACTLY WITH LITTLE OR NO NEED FOR ACCESS TO REALITY OR A MODEL OF IT. EMPHASIS IS MAINLY ON VERBALLY COMMUNICATING THE CONCEPT, SKILL OR ATTITUDE. EX. lecture	

Extrapolating in terms of cognitive development,

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Cruickshank's model of Uses of Reality and Types of Experience is applicable as follows. First hand experiences either real or modeled are necessary as supportive events for the dualistic student. The multiplistic student needs are met or the challenge of growth for the dualistic student may be dealt with vicariously through the use of reality modeled or real. The stretching or development for the multiplist and the meeting of the relativist may be done abstractly. It is important for the teacher educator to understand that the relativist understands and gleans understanding from all types of experiences, conversely the dualist is unable to glean understanding from abstractions or vicarious events too far removed from the dualists conception of reality. Thus the first year in this developmentally grounded teacher education program would require teacher educators to utilize concrete real or modeled experiences primarily, followed by vicarious real and/or modeled experiences.

B. SECOND AND THIRD YEARS

During the second and third years of the teacher education program, general education studies will form the basis for increasing the knowledge of students. Twelve basic areas of study for the general education component of teacher education programs have been deliniated by Tykociner in Design for a School of Pedagogy (Smith, 1980). The areas

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of study as explicated by Tykociner are:

1. the arts including architexture, choreography, dramatics, graphic arts, industrial arts, landscaping, literature, music, painting and sculpture;

2. symbolics of information including linguistics, mathematics, logic, and information theory;

3. physical sciences including physics, chemistry, astronomy, geology, and mineralogy;

4. biological sciences including botany, zoology, taxonomy, morphology, cytology, genetics and phsyiology;

5. psychological sciences including experimental, developmental, abnormal and others;

6. sociological sciences including sociology, human ecology, demography, social institutions, and ethnology;

7. sciences about the past including history of the world at large, aggregates of human beings, and of society and its cultures;

8. life sustaining sciences including agriculture, medicine, technology and national defense;

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9. regulative sciences including jurisprudence, political science, economics, and management and administration;

10. disseminative sciences including education, library sciences, journalism and others;

11. zetetic sciences including taxilogy, problematology, general methodology and others; and

12. integrative sciences including philosophy, theology and others.

The key to developmental utilization of these twelve areas of study could be accomplished in at least two ways. One, the faculty who assumes responsibility for these areas of study could employ developmental processes. Or, second, the areas of study, themselves may be arranged in an order from concrete to abstract and thusly presented to the teacher education student. Utilizing either approach, it is essential to heed the words of Denemark (1967), general education is the basis for all teaching, indeed, it is the subject matter of schools.

The approach for teacher education students within the second and third years of the program will be threefold: 1) students will be involved in general education areas of study; 2) students will practice using the knowledge provided within these courses through modeled or real

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teaching experiences; and 3) students will apply, through structured assignments, this new knowledge to their areas of speacialty.

C. FOURTH YEAR

If the developmental paradigm has been successful, by this point in time the teacher education student should be an able analyzer, applier, evaluator and synthesizer of information. Intellectual and psychosocial developmental advances make introspection viable at this point enabling these teacher education students to become informed problem solvers. Students will be expected to know theory and strategically apply the parts of theory that are applicable to each unique setting in which they find themselves. Ideally, these students will now be able to view schools and modeled school settings as an anthropologist might, becoming consciously aware of their folkways, sanctions and rituals (Friedenburg, 1967).

The format of this fourth year will require the student to be involved in professional/pedagogical studies with emphasis in the student's specialty areas while simultaneously being placed within actual school settings for application of pedagogical skills and professional knowledges.

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D. FIFTH YEAR

The fifth year of the student's program will be split with one half of the time being spent within schools practicing pedagogical skills and reflecting upon those experiences in structured seminars and one half of the time being spent with mentors who will aid in self-analysis of the students professional skills, knowledge base, communications skills, interpersonal skills, etc.

At this point in time, developmentally, the student now has all of the realms of meaning making available. Commitment is at hand. The door is wide open for these students to see themselves and their situations, reflect upon themselves and those situations as well as contrived situations allowing increased chances that more appropriate strategies will be chosen, better choices made and more effective teachers employed.

E. CARING CURRICULUM

Undergirding the five year teacher education program is a component labeled the Caring Curriculum. This aspect of the program will run throughout the entire teacher education program. This component of the program is designed to enhance the psychosocial aspects of the teacher education student. The Caring Curriculum will simultaneously serve two purposes: 1) it will aid students in search of self in terms of life span development as delineated by Chickering (1969); and 2) this self awareness and development will

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inturn aid the students to become more effective teachers in the sense of humanistic education or indirectness (Flanders and Amidon, 1970).

Content to be included within this undergirding and over the five year span of time could be: cognitive development literature, psychosocial development literature, assertiveness training, counseling skills, communication skills, moral development literature, ethical dimensions of teaching and education, power of positive thinking literature, creativity literature, etc.

The structure of this undergirding element is critical. Once again the cognitive developmental levels of the students must guide the processes utilized within the presentation of this content.

Schematically, the proposed developmental approach to teacher education innovation and intervention appears as follows:

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TABLE 3: DEVELOPMENTAL TEACHER EDUCATION PROGRAM

YEAR	CONTENT	PROCESS
ONE	MICROTEACHING REFLECTIVE TEACHING CLASSROOM MANAGEMENT REINFORCEMENT THEORIES TEACHER EFFECTIVENESS LIT. EVALUATION TECHNIQUES MOTIVATION TECHNIQUES ASSESSEMENT INFORMATION PERCEIVED TEACHER PROBLEMS SELF-CONCEPT AND EFFICACY INFORMATION	APPROPRIATE TO DEVELOPMENTAL LEVELS
TWO-THREE	GENERAL STUDIES AREAS	APPROPRIATE TO DEVELOPMENTAL LEVEL WTIH APPLICATION OF KNOWLEDGE IN TEACHING SETTINGS REAL AND MODELED
FOUR	PEDAGOGICAL SKILLS PERTAINING TO SPECIALTY	APPROPRIATE TO DEVELOPMENTAL LEVEL APPLICATION IN SCHOOL SETTINGS
FIVE	ACTUAL EXTENDED PRATICUM SELF-ANALYSIS AND ENHANCEMENT	APPROPRIATE TO DEVELOPMENTAL LEVELS
UNDERGIRDING	CARING CURRICULUM	PSYCHOSOCIAL AND COGNITIVE APPROPRIATENESS

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BIBLIOGRAPHY

Adams, R. & Craig, J. "A Status Report of Teacher Education Program Evaluation". JOURNAL OF TEACHER EDUCATION. Vol. 34, No. 2., 1981.

Adams, R. & Craig, J. "Program Evaluation and Program Development in Teacher Education: A Response to Katz et al. JOURNAL OF TEACHER EDUCATION. Vol 32, No.5, 1981.

Andrews, O. "A Curriculum to Produce Career Teachers for the 1980's". THEORY INTO PRACTICE, 1967.

Astin, A., FOUR CRITICAL YEARS: EFFECTS OF COLLEGE ON BELIEFS, ATTITUDES AND KNOWLEDGE. San Francisco, California: Jossey Bass. 1977.

Bell, T. H. In " "Higher Education Reports", BRIEFS. December 1984. Vol.5 No.10. AACTE

Blake, L. "A Measure of Developmental Change: A Cross-Sectional Study." Paper presented at the annual meeting of the American Psychological Association, Washington, D. C. , 1976.

Bradburn, N. THE STRUCTURE OF PSYCHOLOGICAL WELL-BEING. Chicago: Aldine Publishing Co., 1969.

Corbin,W. "Universities Should Get Out Of the Business of Teaching Teachers" THE CHRONICLE OF HIGHER EDUCATION Jan. 23, 1985 Vol.29. No.19.

deVoss, G. FOLLOW-UP PROJECT TECHNICAL REPORT. The Ohio State University Press, 1978.

_____. FOLLOW-UP PROJECT TECHNICAL REPORT. The Ohio State University Press, 1979.

_____. FOLLOW-UP PROJECT TECHNICAL REPORT. The Ohio State University Press, 1980.

Drum, D., In DIMENSIONS OF INTERVENTION FOR STUDENT DEVELOPMENT (Morrill, W., Hurst, J., and Oetting, E.R. editors). New York: John Wiley & Sons 1980.

Drummond, . THE FOLLOW-UP STUDY OF THE UNIVERSITY OF MAINE AT ORONO. 1978.

Dunkin, M. & Biddle, B., THE STUDY OF TEACHING Holt, Rinehart and Winston, Inc. 1974.

BEST COPY AVAILABLE

Erickson, E., IDENTITY YOUTH AND CRISIS. New York : W. W. Norton and Company, 1968.

Erickson, E., CHILDHOOD AND SOCIETY. New York: W.W. Norton and Company Inc., 1963.

Erickson, E. DIMENSIONS OF A NEW IDENTITY. New York: W. W. Norton and Company, 1974.

Farrell, M. & Rosenburg, S., MEN AT MIDLIFE. Boston, Mass.: Auburn House Publishing Co., 1981.

Flavell, J. H., THE DEVELOPMENTAL PSYCHOLOGY OF JEAN PIAGET. New York: Van Nostrand Reinhold Company, 1963.

Fuller, F. and Bown, O . "On Becoming a Teacher". TEACHER EDUCATION: NSSE YEARBOOK 1975 14:2.

Gay, R. L., EDUCATIONAL RESEARCH: COMPETENCIES FOR ANALYSIS AND APPLICATION. Columbus, Ohio: Merrill Publishing,1976.

Haberman, M and Stinnett, T.M. TEACHER EDUCATION AND THE PROFESSION OF TEACHING. McCutcheon Publishing Corp. Berkeley, CA. 1973.

Hange, J. Teachers in Their Fifth Year: An Analysis of Teaching Concerns from the Perspective of Adult and Career Development. Unpublished doctoral dissertation. The Ohio State University, 1981.

Harvey, D. J., Hunt, D. E., Schroder, H. M. CONCEPTUAL SYSTEMS AND PERSONALITY ORGANIZATION. New York: Wiley & Sons, 1961.

Heidke, J. D., A STUDY OF COGNITIVE-INTELLECTUAL AND PSYHCOSOCIAL DEVELOPMENT OF WOMEN AT KENYON COLLEGE AND THE OHIO STATE UNIVERSITY. Unpublished doctoral dissertation. The Ohio State University, 1982.

Howsam, R. et al. Educating a Profession. Bicentennial Report. AACTE, 1976. Washington, D.C.

Hunt, D. E., " A Conceptual Level Matching Model for Coordinating Learner Characteristics with Educational Approaches." INTERCHANGE, 1970, Vol.1

Hunt, D., MATCHING MODELS IN EDUCATION. Monograph Series No. 10 Ontario: Ontario Institute for Studies in Education, 1971.

Hurst, J. C., Chickering's vectors of development and

BEST COPY AVAILABLE

student affairs programming. In C. A. Parker (Ed.) ENCOURAGING DEVELOPMENT IN COLLEGE STUDENTS. Minneaplois: University of Minnesota Press, 1978.

Katz, L., Raths,J., Mohanty,C., Kurachi, A., & Irving, J. "Follow-Up Studies: Are They Worth the Effort?". JOURNAL OF TEACHER EDUCATION, Vol.32 No.2, 1981.

Keeton, M. & Associates. EXPERIENTIAL LEARNING: RATIONALE, CHARACTERISTICS, AND ASSESSMENT. San Francisco: Jossey - Bass, 1977.

King, P. M., THE DEVELOPMENT OF REFLECTIVE JUDGMENT AND FORMAL OPERATIONAL THINKING IN ADOLESCENTS AND YOUNG ADULTS. Unpublished doctoral dissertation University of Minnesota, 1977.

KING, P. M."William Perry's Theory of Intellectual and Ethical Development." NEW DIRECTIONS FOR STUDENT SERVICES, 1978.

Kitchener, K. S., INTELLECTUAL DEVELOPMENT IN LATE ADOLESCENTS AND YOUNG ADULTS: REFLECTIVE JUDGMENT AND VERBAL REASONING. Unpublished doctoral dissertation, University of Minnesota, 1977.

Knefelkamp, L. L., DEVELOPMENTAL INSTRUCTION: FOSTERING INTELLECTUAL AND PERSONAL GROWTH IN COLLEGE STUDENTS. Unpublished doctoral dissertation University of Minnesota, 1974.

Knefelkamp, L. L., " A Cognitive-Developmental Model Of Career Development: An Adaptation of the Perry Scheme." In C. A. Parker (Ed.), ENCOURAGING DEVELOPMENT IN COLLEGE STUDENTS. Minneapolis: University of Minnesota Press, 1978.

Knefelkamp, L. & Slepitza, R. A., "A Cognitive Developmental Model of Career Development: An Adaptation of the Perry Scheme." THE COUNSELING PSYCHOLOGIST, 1976, Vol. 6, No. 3.

Kurfiss, J., " Sequentiality and Structure in a Cognitive Model of College Student Development." DEVELOPMENTAL PSYCHOLOGY, 1977 Vol. 13.

Leovinger, J., EGO DEVELOPMENT. San Francisco: Jossey-Bass, 1976.

Lewin, K., A DYNAMIC THEORY OF PERSONALITY. New York: McGraw-Hill Book Co., 1935.

Marcia, J. E., "Development and Validation of

BEST COPY AVAILABLE

Ego-Identity Statuses", JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY, 1966 Vol. 3

Marcia, J. E., : Ego Identity Status: Relationship to Change in Self Esteem, "General Maladjustment", and Authoritarianism". JOURNAL OF PERSONALITY, 1967 Vol. 2.

Mason, K. E. "Effects of Developmental Instruction on the Development of Cognitive Complexity, Locus of Control and Empathy in Beginning Counseling Graduate Students." Unpublished masters thesis, University of Maryland, 1978.

Maves, P. B. "Religious Development in Adulthood." In Strommen (Ed.) RESEARCH ON RELIGIOUS DEVELOPMENT New York: Hawthorn Books, 1971.

Meyer, P. "Intellectual Development: Analysis of Religious Content." THE COUNSELING PSYCHOLOGIST. 1977, Vol.6, No. 4.

McKee, B., THE SEASONS OF A MAN'S LIFE. New York: Ballantine Books, 1978.

Mentkowski, M., "Can The Concept of Human Development Supply a Unifying Purpose for Higher Education?" Milwaukee: Alverno College Productions, 1983.

Mitzell, H.E., A Behavioral Approach to the Assessment of Teacher Effectiveness. Unpublished paper, Division of Teacher Education, College of the City of New York. 1957.

Mitzell, H.E., Teacher Effectiveness. In C.W. Harris (ed.) ENCYCLOPEDIA OF EDUCATIONAL RESEARCH (3rd edition). New York: MacMillan, 1967.

National Council for Accreditation of Teacher Education STANDARDS FOR THE ACCREDITATION OF TEACHER EDUCATION. Washington, D.C.: National Council for Accreditation of Teacher Education, 1982.

Otero, Rafeal. THE HANDLING OF STRESSFUL PSYCHOLOGICAL LIFE EVENTS AS A FUNCTION OF A HIERARCHICAL CONFIGURAL PATTERN OF COMPETENCE. Unpublished doctoral dissertation. University of Maryland, 1982.

Parker, C. (ed.). ENCOURAGING DEVELOPMENT IN COLLEGE STUDENTS. Minneapolis: University of Minnesota Press. 1978.

BEST COPY AVAILABLE

Perry, W., FORMS OF INTELLECTUAL AND ETHICAL DEVELOPMENT IN THE COLLEGE YEARS. New York : Holt, Rinehart and Winston 1970.

Perry, W., "Comments on Chapter Two." In C. A. Parker (Ed.) DEVELOPMENTAL CONCEPTS IN COLLEGE INSTRUCTION. Minneapolis: University of Minnesota Press, 1978. Minneapolis: University of Minnesota Press, 1978.

Perry, W. "Sharing the Costs of Growth."

Reinke, Barbara. PSYCHOLOGICAL CHANGES AMONG WOMEN FROM EARLY ADULTHOOD TO MIDLIFE AS A FUNCTION FROM EARLY ADULTHOOD TO MIDLIFE AS A FUNCTION OF CHRONOLOGICAL AGE AND FAMILY CYLCE PHASE Unpublished doctoral dissertation. University of Kansas.

Rodgers, R.F. Unpublished class handout The Ohio State University, 1983.

Rubin, L., WOMEN OF A CERTAIN AGE. New York: Harper Colophon Book, 1979.

Ryan, K., "If I Had It to Do All Over Again", THEORY INTO PRACTICE. Vol. 13, No.3, 1974.

Sanford, N., WHERE COLLEGES FAIL. San Francisco: Jossey Bass, 1967.

Sanford, N., "Developmental Status of the Entering Freshman", THE AMERICAN COLLEGE. New York: John Wiley & Sons, 1966.

Schaeffer, J. "What Happens to the Attitudes of Beginning Teachers". TEACHER EDUCATION. NSSE 14:2, 1975.

Shaw, M. & Costtanzo, P., THEORIES OF SOCIAL PSYCHOLOGY. New York: McGraw-Hill Book Co., 1970.

Sheehy, G., PASSAGES:PREDICTABLE CRISES OF ADULT LIFE. Bantam Books, 1976.

Siegel, S., NON PARAMETRIC STATISTICS FOR THE BEHAVIORAL SCIENCES. New York: McGraw Hill, 1956.

Silberman, C.E. CRISIS IN THE CLASSROOM. New York: Vintage Books, 1970.

Slepitza, R. L., "The Validation of Stage Model of Career Counseling". Unpublished master's thesis,

BEST COPY AVAILABLE

University of Maryland, 1976.

Smith, B.O. DESIGN FOR A SCHOOL OF PEDAGOGY. U.S. Department of Education Publication No. E-80-420000. 1980.

Smith, B.O., Cohen, S. B., & Pearl, A. TEACHERS FOR THE REAL WORLD. Washington, D.C.: American Association of Colleges for Teacher Education, 1969.

Sprinthall, N. and Sprinthall, L. " Educating for Teacher Growth: A Cognitive Developmental Perspective. THEORY INTO PRACTICE. Vol. 29, No. 4, 1980.

Standards for Colleges or Universities Preparing Teachers. Ohio Department of Education, 1975. Columbus, Ohio.

Stephenson, B. & Hunt, C. " Intellectual and Ethical Development: A Dualistic Curriculum Intervention for College Students." THE COUNSELING PSYCHOLOGIST. 1977, Vol. 6 No. 4.

Straub, C. A., AN EXPLORATION OF CHICKERING'S THEORY AND WOMEN'S DEVELOPMENT. Unpublished doctoral dissertation, The Ohio State University, 1982.

Stuck, A. F. A DESCRIPTIVE STUDY OF THE COGNITVE AND PSYCHOSOCIAL DEVELOPMENT OF TEACHER CANDIDATES AND THEIR TEACHER EDUCATORS. Unpublished dissertation, The Ohio State University, 1984

Tamishiro, R. Seminar on Test Construction. The Ohio State University, 1981.

Taylor, M.,
Unpublished doctoral dissertation, The Ohio State University, 1983.

Touchton, J. E., Wertheimer, L. C., Cornfeld, J. L., & Harrison, K. H. "Career Planning and Decision Making: A Developmental Approach to the Classroom." ENCOURAGING DEVELOPMENT IN COLLEGE STUDENTS. Minneapolis: University of Minnesota Press, 1978.

Turiel, E. "Conflict and Transition in Adolescent Moral Development." CHILD DEVELOPMENT, 1974.

Turiel, E. "Conflict and Transition in Adolescent Moral Development, II: The Resolution of Disequilibrium through Structural Reorganization." CHILD DEVELOPMENT, 1977.

Valliant, G., ADAPTATIONS TO LIFE. Boston: Little, Brown and Company, 1977.

BEST COPY AVAILABLE

Welfel, E. R., "The Development of Reflective Judgment: Implications for Career Counseling of College Students." THE PERSONNEL AND GUIDANCE JOURNAL, Sept. 1982.

Wertheimer, L. C., " ANew Model and Measure for Career Counseling: Incorporating Both Content and Processing Aspects of Career Concerns." Unpublished master thesis, University of Maryland, 1976.

Widick, C., AN EVALUATION OF DEVELOPMENTAL INSTRUCTION IN A UNIVERSITY SETTING. Unpublished doctoral dissertation, University of Minnesota, 1975.

Widick, C., Knefelkamp, L. L., Parker, C. A., "The Counselor as a Developmental Instructor," COUNSELOR EDUCATION AND SUPERVISION, 1975, Vol. 14.

Widick, C. & Simpson, D., " The Uses of Developmental Concepts in College Instruction." In C. A. Parker (Ed.) ENCOURAGING DEVELOPMENT IN COLLEGE STUDENTS Minneapolis: University of Minnesota Press, 1978.

BEST COPY AVAILABLE